

Is balloon osteoplasty attractive or questionable treatment for Hill-Sachs lesion?

Oguz Cebesoy · Burak Akan

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Dear Editor,

We have read the article “Balloon osteoplasty—a new technique for minimally invasive reduction and stabilisation of Hill-Sachs lesions of the humeral head: a cadaver study” by Sandmann et al. [1] with great interest.

Hill-Sachs lesion treatment is very difficult regarding its widespread approaches. Too many treatment protocols can be found in current literature with different success rates.

The balloon-osteoplasty technique may be seen as attractive, but we have many questions to the authors about this technique.

1. We use balloon osteoplasty for fresh spinal compression fracture. If compression healed with fibrosis, balloon strength is not sufficient for restoration. Short tau inversion recovery (STIR) sequence is very sensitive for detecting vertebral oedema following fresh fractures or micro-fractures [2]. This study was performed on cadaveric bone and all fractures created manually and were therefore fresh. This is not the case with old Hill-Sachs fractures, which is why it is not so easy to restore height in Hill-Sachs lesions. Violatin might cause joint fracture and leakage to occur into the joint space. Is this technique effective for all kinds of Hill-Sachs lesions?
2. Other technical complications from the inappropriate placement of instruments during balloon osteoplasty

have resulted in a breach of the joint and inadvertent leakage of cement into the spinal canal. Your instruments were modified; thus, is the entrance point the same for all patients? And is one modified instrument sufficient for all kinds of Hill-Sachs lesions?

3. What is the time of exposure to radiation?
4. Is the modified instrument cost high?
5. What is the ideal amount of augmentation necessary to restore a desirable degree of local strength and stiffness?

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With our cordial regards.

References

1. Sandmann GH, Ahrens P, Schaeffeler C, Bauer JS, Kirchhoff C, Martetschläger F, Müller D, Siebenlist S, Biberthaler P, Stöckle U, Freude T (2012) Balloon osteoplasty—a new technique for minimally invasive reduction and stabilisation of Hill-Sachs lesions of the humeral head: a cadaver study. *Int Orthop*. doi:10.1007/s00264-012-1647-x
2. Spiegl UJ, Beisse R, Hauck S, Grillhösl A, Bühren V (2009) Value of MRI imaging prior to a kyphoplasty for osteoporotic insufficiency fractures. *Eur Spine J* 18(9):1287–1292

O. Cebesoy (✉)
Orthopedic and Traumatology Department,
Gaziantep University Faculty of Medicine,
Gaziantep, Turkey
e-mail: ocebey@myynet.com

B. Akan
Orthopedic and Traumatology Department,
Ufuk University Faculty of Medicine,
Ankara, Turkey
e-mail: burakakan1977@yahoo.co.uk